



Kentucky Agricultural Statistics Service  
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# KENTUCKY WEEKLY CROP & WEATHER REPORT



Prepared in Cooperation with:  
Univ. of Ky - Agr'l Weather Center  
U.S. Dept. of Commerce - NOAA  
Kentucky Department of Agriculture  
Cooperative Extension Service

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**AGRICULTURAL NEWS:** Farmers were anxious to get into their fields in between breaks in the wet weather. Temperatures for the period averaged 75 degrees, 7 degrees above normal and 5 degrees warmer than the previous week. Rainfall totaled 0.68 inches statewide, which was 0.38 inches above normal. Main farming activities included putting up hay, finishing corn planting, setting tobacco, and planting soybeans. **Topsoil moisture**, as of Friday, May 21, was rated 1 percent very short, 7 percent short, 72 percent adequate and 20 percent surplus. **Subsoil moisture**, was rated 2 percent very short, 9 percent short, 78 percent adequate, and 11 percent surplus. Days suitable for fieldwork averaged 3.8 out of a possible 7 days.

**SMALL GRAINS:** As of Friday, May 21, wheat condition was rated 2 percent poor, 18 percent fair, 56 percent good, and 24 percent excellent. Farmers began reporting grain lodging and damage due to the wet weather. The earliest date farmers expect wheat harvest to begin is June 17th. Harvest of the barley crop is expected to begin around May 29th.

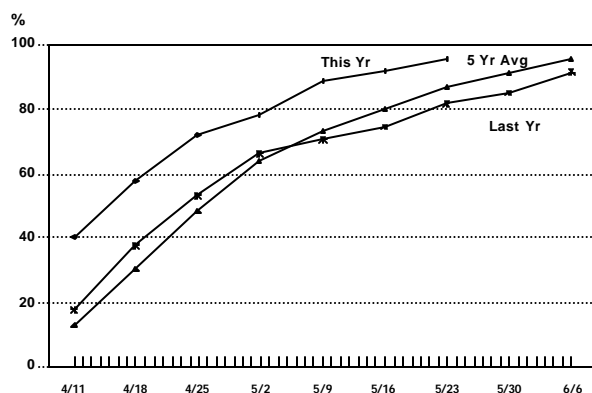
**TOBACCO:** Farmers were setting their burley and dark tobacco as soil conditions permitted. As of Sunday, May 23, burley tobacco set was 38 percent complete, 17 percent ahead of the previous year and 2 percent above average. Dark tobacco was 26 percent set, 3 percent ahead of the previous year but 14 percent behind average. Condition of

the set tobacco crop was 2 percent poor, 21 percent fair, 68 percent good, and 9 percent excellent.

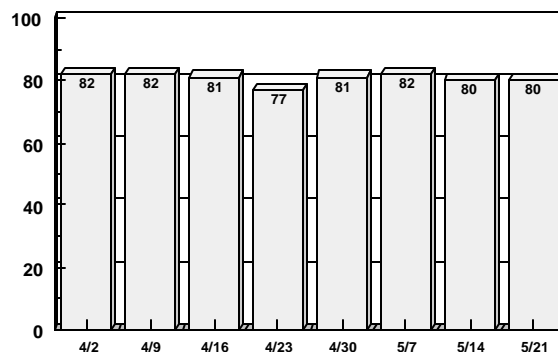
**CORN AND SOYBEANS:** Planting progress continued to be hampered last week by rainfall and wet field conditions. Many areas still need to be replanted. As of Sunday, May 23, farmers had planted 96 percent of their intended corn acreage, 14 percent ahead of last year, and 9 percent above average. Emerged corn reached 86 percent, ahead of the 73 percent last year and the five year average of 79 percent. Average emerged corn height was 11 inches with the most advanced fields 20 inches tall. As of Friday, the corn emerged condition rated 2 percent very poor, 5 percent poor, 21 percent fair, 48 percent good and 24 percent excellent. Soybeans were 35 percent planted, 21 percent ahead of last year, and equal to the five year average. Emerged soybeans were 28 percent, compared to 6 percent last year and a five year average of 22 percent.

**OTHER CROPS:** Hay was harvested as the weather permitted. There is still a lot left to be cut. Hay crop condition was 1 percent very poor, 2 percent poor, 20 percent fair, 55 percent good, and 22 percent excellent. Pasture condition was rated 1 percent very poor, 2 percent poor, 18 percent fair, 55 percent good, and 24 percent excellent. Grain sorghum was 40 percent planted, compared to 8 percent last year, and the five year average of 36 percent.

CORN PLANTING PROGRESS



WHEAT CONDITION  
% Good to Excellent



# KENTUCKY CROP PROGRESS

WEEK ENDING MAY 23, 2004

WITH COMPARISONS

Crop Stage	This Week	Previous Year	5-Yr. Avg.	Previous Week KY	U.S.
Percentage					
Corn					
Planted	96	82	87	92	92
Emerged	86	73	79	80	63
Soybeans					
Planted	35	14	35	20	54
Emerged	28	6	22	6	19
Sorghum					
Planted	40	8	36	11	36
Burley Tobacco Set	38	21	36	19	NA
Dark Tobacco Set	26	23	40	15	NA

(NA) Data Not Available.

# SOIL MOISTURE

WEEK ENDING MAY 21, 2004

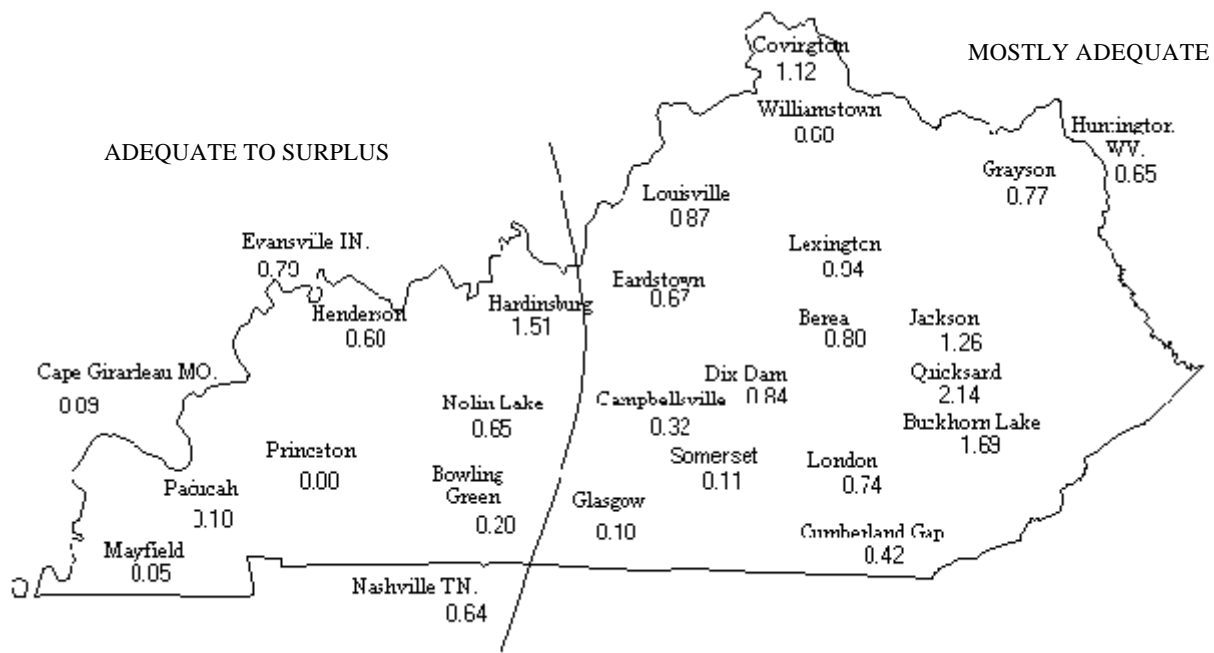
WITH COMPARISONS

	This Week	Previous Week
Percentage		
<b>TOPSOIL</b>		
Very Short	1	2
Short	7	14
Adequate	72	64
Surplus	20	20
<b>SUBSOIL</b>		
Very Short	2	1
Short	9	8
Adequate	78	79
Surplus	11	12

# KENTUCKY CROP CONDITIONS (Percent)

CROP	WEEK ENDING MAY 21, 2004					WEEK ENDING MAY 14, 2004				
	VERY POOR	POOR	FAIR	GOOD	EXCEL- LENT	VERY POOR	POOR	FAIR	GOOD	EXCEL- LENT
Corn Emerged	2	5	21	48	24	1	4	23	51	21
Wheat	0	2	18	56	24	0	3	17	53	27
Pasture	1	2	18	55	24	1	2	18	56	23
Hay Crops	1	2	20	55	22	1	3	21	54	21
Tobacco Set	0	2	21	68	9	0	2	16	70	12

# PRECIPITATION MAP FOR WEEK ENDING SUNDAY, MAY 23, 7:00 P.M. TOPSOIL MOISTURE DELINEATION FOR WEEK ENDING FRIDAY, MAY 21, 2004



# KENTUCKY WEATHER SUMMARY, MAY 17 - 23, 2004:

## ABOVE NORMAL TEMPERATURES AND BELOW NORMAL PRECIPITATION:

Most of the rain that fell this week occurred at the beginning of the week. Warm humid air and instability in the atmosphere allowed scattered thunderstorms to develop. Rainfall was locally heavy with some flooding occurring. Most of the storms were across the central and eastern Kentucky, leaving western areas dry for the week. By midweek a high pressure system moved in across the southeastern U.S. This kept most of the rain north of Kentucky. Highs all week were in the 80's, and lows were generally in the upper 60's and lower 70's. Dew point temperatures in the 60's and 70's kept conditions humid for the whole week.

Temperatures for the period averaged 75 degrees across the State which was 7 degrees above normal and 5 degrees warmer than the previous week. High temperatures averaged from 85 in the West to 83 in the East. Departure from normal high temperatures ranged from 3 degrees above normal in the West to 6 degrees above normal in the East. Low temperatures averaged from 67 degrees in the West to 63 degrees in the East. Departure from normal low temperature ranged from 10 degrees above normal in the West to 7 degrees above normal in the East. Extreme highs were in the upper 80's. Extreme lows were in the upper 50's.

Rainfall for the period totaled 0.68 inches statewide which was 0.38 inches below normal. Precipitation totals by climate division, West 0.27 inches, Central 0.67 inches, Bluegrass 0.81 inches and East 0.97 inches, which was 0.83, 0.44, 0.21 and 0.04 inches respectively below normal. By station, precipitation totals ranged from a low of 0.00 inches at Princeton to a high of 2.14 inches at Quicksand.

Tom Priddy

## KENTUCKY TEMPERATURES AND RAINFALL

FOR WEEK ENDING SUNDAY, MAY 23, 7:00 P.M.

Weather Station	Rainfall			Deviation From		Air Temperature				Growing Degree Days		
	Last Week	Since April 1	Last Four Wks	Norm Since Apr. 1	Norm Last 4 Wks	High	Low	Wkly. Avg.	Dev. From Norm	Last Week	Since Apr. 1	Dev. Since Apr. 1
	(Inches)			(Degrees Fahrenheit)								
Bardstown	0.67	8.74	4.24	+1.54	+0.28	87	61	75.1	+7	173	733	+88
Berea	0.80	7.20	2.67	-0.63	-1.61	86	64	75.4	+8	176	792	+124
Bowling Green	0.20	9.86	4.75	+1.87	+0.36	87	61	76.2	+8	180	774	+106
Bristol	0.16	5.67	2.31	-0.52	-1.13	88	56	71.9	+5	150	682	+90
Buckhorn Lake	1.69	8.37	4.47	+1.57	+0.80	85	59	72.1	+5	153	708	+116
Cape Girardeau	0.09	6.32	3.54	-1.96	-1.05	87	64	75.8	+6	177	743	+52
Campbellsville	0.32	8.66	3.61	+0.07	-1.03	87	60	74.6	+7	171	774	+106
Covington	1.12	7.66	3.75	+0.73	-0.05	84	58	74.1	+7	167	628	+66
Cumberland Gap	0.42	7.56	3.52	-0.09	-0.73	87	59	72.9	+6	156	706	+114
Dix Dam	0.84	7.42	3.30	-0.32	-0.92	86	63	75.4	+9	175	742	+97
Evansville	0.79	5.80	4.19	-1.74	-0.00	89	59	76.1	+6	179	773	+135
Glasgow	0.10	11.30	4.63	+3.00	+0.12	89	60	76.2	+8	175	847	+239
Grayson	0.77	6.39	2.27	-0.40	-1.50	87	58	74.3	+7	168	731	+192
Hardinsburg	1.51	10.11	5.65	+2.19	+1.32	87	56	74.7	+7	170	757	+89
Henderson	0.60	7.65	5.02	+0.01	+0.93	87	62	75.7	+6	179	776	+108
Huntington	0.65	6.11	1.76	-0.65	-2.00	88	56	74.5	+8	166	737	+145
Jackson	1.26	6.73	3.40	-0.69	-0.61	84	61	72.4	+5	155	726	+134
Lexington	0.94	7.39	3.75	+0.19	-0.21	84	62	74.2	+7	168	682	+120
London	0.74	7.51	4.23	+0.43	+0.42	86	59	72.6	+6	156	699	+107
Louisville	0.87	8.96	4.43	+1.30	+0.30	87	61	75.7	+8	178	746	+108
Mayfield	0.05	6.25	3.23	-2.52	-1.33	86	61	74.6	+5	171	733	+12
Nashville	0.64	12.01	5.46	+4.02	+1.11	88	64	75.6	+8	177	815	+94
Nolin Lake	0.65	10.23	4.92	+1.63	+0.10	87	59	75.6	+8	177	780	+135
Paducah	0.10	6.34	3.40	-2.34	-1.10	88	66	77.1	+7	186	806	+115
Princeton	0.00	8.10	3.83	-0.38	-0.65	88	65	76.4	+6	182	825	+127
Quicksand	2.14	8.94	4.80	+1.52	+0.79	84	59	72.3	+5	155	722	+130
Somerset	0.11	6.22	3.04	-1.89	-1.45	86	60	72.5	+6	156	697	+52
Spindletop	0.55	5.84	2.81	-1.36	-1.15	83	60	73.8	+7	165	674	+112
Williamstown	0.60	6.00	2.28	-1.42	-1.68	85	60	74.4	+8	169	708	+146

The above information is provided by Tom Priddy, Kentucky Extension Agricultural Meteorologist, University of Kentucky Agr'l Weather Center (859)257-3000 ext 245. E-mail: priddy@uky.edu Additional Ky weather data available on Internet at: <http://www.wagwx.ca.uky.edu/>

## A GUIDE TO GROWING DEGREE DAYS

For the 2004 growing season, the Kentucky Agricultural Statistics Service in cooperation with the National Weather Service will provide weekly accumulated growing degree days (GDD) data.

These GDD are calculated according to the definition:

$$\text{GDD} = \frac{\text{Daily Max } (\leq 86^{\circ}\text{F}) + \text{Daily Min } (\geq 50^{\circ}\text{F})}{2} - 50^{\circ}\text{F}$$

Maximum temperatures above 86°F are entered as 86° and minima below 50° are entered as 50°. This modification is designed to take into account the differing response of plants to quite high or quite low temperatures. There are several methods of calculating GDD, but the above formula is most widely accepted. This adjusted 50°F method of calculating GDD has been adopted by the Hybrid Seed Corn Industry as a basis for a uniform maturity rating system.

At 50°F corn grows hardly at all. As the temperature rises up to the range of 80° to 86°F, corn grows faster if moisture is adequate. When the temperature rises above 86°F the roots have increasing difficulty taking in water fast enough to keep plant cells turgid (full of water) and working at top speed. When soil moisture is short, the optimum temperature is less than 80°F. With perfect moisture supply the optimum temperature is likely 90° to 95°F.

The concept of growing degree days is still under study and refinement. In its short existence growing degree days has proven to be a much better gauge for rating corn maturity than the old "days of maturity" rating. The use and importance of GDD will improve as information is collected over the years.

## Corn Percent Planted

State	May 16 2004	Prev Week	Prev Year	5-Yr Avg
CO	79	47	62	69
IL	98	95	77	80
IN	93	87	60	70
IA	98	94	75	85
KS	95	84	87	88
<b>KY</b>	<b>92</b>	<b>89</b>	<b>75</b>	<b>80</b>
MI	65	60	38	59
MN	98	90	89	82
MO	96	95	78	79
NE	95	85	68	81
NC	97	96	89	94
ND	83	73	65	56
OH	82	62	86	77
PA	67	54	51	61
SD	88	71	63	58
TN	98	95	89	94
TX	96	94	96	95
WI	69	56	56	64
ALL	92	84	73	77
These 18 States planted 92% of last year's corn acreage.				

## Soybean Percent Planted

State	May 16 2004	Prev Week	Prev Year	5-Yr Avg
AR	47	38	34	32
IL	57	33	18	40
IN	66	48	24	46
IA	76	51	15	39
KS	31	16	22	31
<b>KY</b>	<b>20</b>	<b>15</b>	<b>10</b>	<b>21</b>
LA	60	54	38	52
MI	33	22	10	29
MN	72	47	35	40
MS	93	89	77	72
MO	39	29	16	27
NE	51	25	17	32
NC	21	13	15	19
ND	41	27	16	19
OH	54	28	46	53
SD	36	15	13	19
TN	17	12	8	17
WI	22	13	17	29
ALL	54	35	23	36
These 18 States planted 96% of last year's soybean acreage.				

This release and others can be viewed on the Internet at <http://www.nass.usda.gov/ky/> For a free E-Mail subscription of the Kentucky Weekly Crop & Weather report, on the Internet go to <http://www.nass.usda.gov/sub-form.htm> and follow the instructions.